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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,164	10/22/2003	Declan Macken	S01.12-1002/STL 11552.00	6508
27365	7590	07/27/2005	EXAMINER EVANS, JEFFERSON A	
SEAGATE TECHNOLOGY LLC C/O WESTMAN CHAMPLIN & KELLY, P.A. SUITE 1400 - INTERNATIONAL CENTRE 900 SECOND AVENUE SOUTH MINNEAPOLIS, MN 55402-3319			ART UNIT 2652	
DATE MAILED: 07/27/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/691,164	<b>Applicant(s)</b> MACKEN ET AL.	
	<b>Examiner</b> Jefferson A. Evans	<b>Art Unit</b> 2652	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25 is/are allowed.
- 6) ☒ Claim(s) 1,5-13,18,22 and 23 is/are rejected.
- 7) ☒ Claim(s) 2-4,14-17,19-21 and 24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

Claims 1 to 25 are pending.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 5, 10, 11, 13, 18, and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Meyer (U.S. 6,859,346). Meyer discloses a slider comprising: a slider body (32) having a trailing edge (34) and a leading edge; a thin film structure (132) deposited in layers on the trailing edge, the structure comprising: a write transducer (23) configured to write data to a storage medium; and a non-thermally activated actuator (144,148) at least partially formed with the write transducer and configured to move the write transducer relative to the trailing edge. Notes figures 1d, 4a,4b, and column 10 – lines 1 to 27. The actuator can be considered to be at least partially formed with the write transducer in that the actuator flexures 144 also act as electrical connectors for the write transducer. Figure 4a shows conductive pads connected to the flexures which act as electrical connectors. The head may be a combination read/write head (figure 1d).

3. Claims 1, 5, 6, 9-11, 18, 22, and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Lewis et al (U.S. 6,570,730). Lewis discloses a slider comprising: a slider

Art Unit: 2652

body (12) having a trailing edge and a leading edge (figure 3A); a thin film structure deposited in layers on the trailing edge, the structure comprising: a write transducer (48) configured to write data to a storage medium; and a non-thermally activated actuator (58) at least partially formed with the write transducer and configured to move the write transducer relative to the trailing edge. Notes figures 2, 3A, and 3B. The actuator can be considered to be at least partially formed with the write transducer in that the actuator supports the write transducer on the slider. The head may be a combination read/write head (column 3 – line 45). The actuator may be formed from piezoelectric material (column 4 – lines 20 to 33). The actuator includes conductive contacts (56).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer. Meyer discloses the write head formed over the read head as opposed to forming the read head over the write head.

Official Notice is given that in a combination read/write head it was known to reverse the ordering of the forming of the read head and the write head.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form Meyer to have the read head formed over the write head. The motivation would have been: it was well established in the art that order could be reversed with the combination head being of utility in either form as both read and write functions are retained.

6. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis et al. Lewis is silent as to the forming order of his read and write heads.

Official Notice is given that in a combination read/write head it was known to reverse the ordering of the forming of the read head and the write head.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form Lewis to have the write head formed over the read head or vice versa. The motivation would have been: it was well established in the art that order could be reversed with the combination head being of utility in either form as both read and write functions are retained.

7. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis et al. Lewis discloses the actuator material between the contacts as opposed to both contacts both being formed on one side or the other of the actuator material.

Official Notice is given that it was notoriously old and well known in the art at the time the invention was made that piezoelectric material actuation could be achieved by

having contacts be formed on the same side of the piezoelectric material as an alternative to having leads on opposite sides.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form both the electrical contacts on one side or the other of the piezoelectric actuator material. The motivation would have been: such an arrangement was a known substitute for and/or equivalent to having the electrical contacts on the same side of the piezoelectric actuator material, and had advantages such as allowing the electrical contacts to be formed in the same formation step

***Allowable Subject Matter***

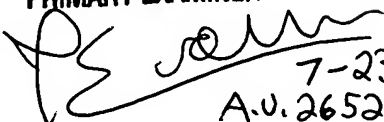
8. Claim 25 is allowed. Claims 2-4, 14-17, 19-21, and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jefferson A. Evans whose telephone number is 571-272-7574. The examiner can normally be reached on Monday to Friday, 9:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Thi Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JEFFERSON EVANS  
PRIMARY EXAMINER

  
7-23-05  
A.U. 2652